ABSTRACT

A manufacturing method for an optical element includes providing a base member for an optical element and a cutting tool from which a blade tip part protrudes, forming an inspecting groove on a surface of the base member by the blade tip part of the cutting tool by relatively moving the cutting tool and the base member while the cutting tool is rotated and inspecting an inclination of a cut surface of the inspection groove formed by the cutting tool to form an inspection result. The method also includes correcting an angle defined by the base member and the blade tip part of the cutting tool based on the inspection result and forming formal grooves on the surface of the base member having the inspection groove by the blade tip part of the cutting tool by relatively moving the cutting tool and the base member while the cutting tool is rotated simultaneously with the inspection groove being cut out.